

Mueller (Baron von), F.R.S. Description and Illustrations of the Myoporinous Plants of Australia. Lithograms. 4to. *Melbourne* 1886. The Author.

Rambaut (A. A.) On the Possibility of determining the Distance of a Double Star. 8vo. *Dublin* 1886; On the Reduction of Bessel's Precessions to those of Struve. 8vo. *London* 1886. The Author.

Rayleigh (Lord), Sec. R.S. Electrical Measurements. 4to. [*London*] 1886. The Author.

Reade (T. Mellard) The Origin of Mountain Ranges. 8vo. *London* 1886. The Author.

Sang (E.) A new general Theory of the Teeth of Wheels. 8vo. *Edinburgh* 1852. The Author.

Selwyn (Alfred), F.R.S. Descriptive Catalogue, Economic Minerals of Canada, Colonial and Indian Exhibition, 1886. 8vo. *London* 1886. The Author.

Spencer (J. W.) Niagara Fossils. 8vo. *St. Louis* 1884. The Author.

January 13, 1887.

Professor STOKES, D.C.L., President, in the Chair.

The Presents received were laid on the table, and thanks ordered for them.

The Right Hon. Hardinge Stanley Giffard, Lord Halsbury (Lord High Chancellor), whose certificate had been suspended as required by the Statutes, was balloted for and elected a Fellow of the Society.

The following Papers were read :—

- I. "Supplementary Note* on *Polacanthus Foxii*, describing the Dorsal and some parts of the Endoskeleton imperfectly known in 1881." By J. W. HULKE, F.R.S. Received December 14, 1886.

(Abstract.)

The author describes the large dorsal shield, which has been recently restored and now exhibits the grouping of the keeled and tuberculated fragments, which in their disconnected and scattered

* See 'Phil. Trans.,' vol. 172 (1881).

condition had formerly been regarded as portions of separate scutes. This unique specimen shows *Polacanthus* to have possessed a more complete dermal armature than any other Dinosaur yet described. The pelvis is more fully described than was possible in 1881, and in particular the form and direction of the ischian arch shown to be different from those obtaining in the *Iguanodont* family.

II. "The Reputed Suicide of Scorpions." By ALFRED G. BOURNE, D.Sc., Fellow of University College, London, and Professor of Biology in the Presidency College, Madras. Communicated by Professor RAY LANKESTER, F.R.S. Received December 22, 1886.

The legend that a scorpion when placed within a ring of red-hot embers will, after making futile efforts to pass the fiery circle which surrounds it, deliberately kill itself by inflicting a wound with its sting in its own head is said to emanate from Spain, and is of considerable antiquity: it has been, moreover, attested by very high authority.

The phenomenon would, however, be so extraordinary that its occurrence has been much doubted. Did it happen, it would stand as *Romanes** says "as a unique case of an instinct detrimental alike to the individual and to the species."

The subject has within recent years attracted a considerable amount of attention, and numerous conflicting statements based both upon incidental observations and upon definite experiments have been from time to time recorded.

Surgeon-General Bidie of Madras has described† an experiment where he concentrated the sun's rays with a burning glass upon the back of a scorpion, which thereupon stung itself and died. Dr. Allen Thomson‡ also brings forward corroborative evidence as to the effect of rays of light. Mr. Gillman‡ described experiments made with a circle of glowing charcoal in which he states that the scorpions died from their own sting. Mr. R. F. Hutchinson§ pointed out that the animals experimented upon by Mr. Gillman died from the excessive heat. Mr. Gillman, however, subsequently pointed out that the temperature in the centre of such a circle of glowing charcoal as he used does not exceed 50° C.

Mr. Curran§ tried the same experiment "a score of times," and

* 'Animal Intelligence,' p. 225.

† 'Nature,' vol. 11.

‡ 'Nature,' vol. 20.

§ 'Nature,' vol. 21.